

Date: Mon, 12 Apr 93 14:30:56 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #453
To: Info-Hams

Info-Hams Digest Mon, 12 Apr 93 Volume 93 : Issue 453

Today's Topics:

10meters..and a mini flame.
10m is dead?
European-size envelopes
Gray line Dxing
Hamming on St. Thomas, USVI?
Help!
help me please identify old transistors
N0DH address no good?
OPDX Bulletin #107 - April 12, 1993
QSL cards from Mongolia
RFD: rec.radio.amateur reorganization

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 12 Apr 1993 21:01:50 GMT
From: news.service.uci.edu!ttinews!avatar!sorgatz@network.UCSD.EDU
Subject: 10meters..and a mini flame.
To: info-hams@ucsd.edu

As the sunspot cycle winds down and the dx gets to be more scarce there are
some things to consider:

Local 10m nets - to keep the band occupied. Least anyone forget the madness
that lurks just below (and nowadays above!) 28 MHz. If we don't use it then
'someone else' will!

Switch to rtty and cw from phone - better for the long haul and short band openings that we will be seeing after this summer.

AM and FM operations - OK so I'm not PC in posting my advocacy of using these 'more spectrum intensive' modes...big deal, they are a lot of fun and with the fade of the dx, very local use of FM and slightly wider use of AM can easily be justified since propagation is down.

High-power - Right, so you've spent the Farm on one of ETO's best ALPHA's; or your junk-box 8877 MONSTER AMP is *finally* done! Well, ok...let's just see what this puppy will do thru the 3 element monobander for 10 meters! Not as many people to work, but a swell test of your new QRO capabilities.

More SSTV - with less and less A3J phone ops crowding the band, there's a bit more space for you SSTV buffs to open up and trade pics. IMHO - high time!

Contests - WHO CARES?! "Yeah..your 5 & 9 too..but could you repeat your call sign slowly and phonetically a few times OM?" Lowered propagation numbers will mean that the RCC people wont be shoved off the band by the Paper Chasers. (suits me just fine...)

QRP - yeah...that's right, QRP! - So ya built (or bought) a little 10m QRP rig. Well now's a swell time to have some fun with it. Lower prop numbers are really a blessing in disguise here, since you won't have as many signals to stomp your 1 watt into the mud. Besides, when the rare openings come most QRP folks are right on top of the situation. Tune your FM scanner to the top of 10m and wait for signals from the repeaters to clue you.

And-then-again-there's-always-the-lower-bands or OSCAR...;-)

OK, mini flame:

WHEN IS THE ARRL GONNA DO SOMETHING ABOUT THE !@#\$\$%^&*()_+ bootleggers FROM 11 meters THAT KEEP RUINING THE 28.0-28.15 SEGMENT? ARE YOU PEOPLE EVEN AWARE OF THE PROBLEM?

<flame off>

73!

-Avatar-> (aka: Erik K. Sorgatz) KB6LUY +-----+
TTI(sorgatz@soldev.tti.com)sorgatz@avatar.tti.com * Kill ALL bureaucrats! *
3100 Ocean Park Blvd. Santa Monica, CA 90405 +-----+
(OPINIONS EXPRESSED DO NOT REFLECT THE VIEWS OF CITICORP OR ITS MANAGEMENT!)

Date: 12 Apr 1993 20:21:01 GMT

From: usc!zaphod.mps.ohio-state.edu!uwm.edu!lll-winken.llnl.gov!sun-barr!
news2me.EBay.Sun.COM!exodus.Eng.Sun.COM!oversteer!wdh@network.UCSD.EDU
Subject: 10m is dead?
To: info-hams@ucsd.edu

In article AA00201@netmail.microsoft.com, a-kevinp@microsoft.COM (Kevin Purcell,
Rho) writes:

>Thats what everyone says -- what they mean is 10m F2 is becoming less
>frequent as the flux declines.

>

>But keep in mind:

>

>1. The solar flux becomes very variable from day to day around the
>minimum. It can suck bad for several days then open up. The problem
>there is there are few people looking for the openings! Listen to the
>beacons and call CQ!

I've wondered why often 10m is dead but there is still a fair amount of 11m SSB
operation. Could it be because the 11m folks have no other band to go to?
Could it be that propagation is better on 11m because it is 1Mhz lower in
frequency? I doubt this. BTW I believe both my radios are healthy and they are
on the same multiband vertical antenna.

If 10m is open but the concentration is too low to find any other ops perhaps
we need a "dead ban call frequency".

Notice I didn't even mention CB...oops...sorry.

...Dennis Henderson, N6TTW, dennis.henderson@Sun.COM

Date: Mon, 12 Apr 1993 20:00:21 GMT
From: math.fu-berlin.de!fauern!lrz-muenchen.de!regent!buettneb@uunet.uu.net
Subject: European-size envelopes
To: info-hams@ucsd.edu

I would say European size envelopes are the ones called DIN C4.
They are 163mm x 114mm, or 6.4" x 4.5".

73 Ben (in Europe)

--

[] Bernhard Buettner (Ben)

[] Mail: Am Brunnen 18, 8011 Kirchheim, Germany

[] Internet: buettneb@guug.de

[] Packet: DL6RAI @ DB0AAB.BAY.DEU.EU

Date: Mon, 12 Apr 1993 19:36:37 GMT
From: sdd.hp.com!cs.utexas.edu!uwm.edu!linac!att!cbnews!jeffj@network.UCSD.EDU
Subject: Gray line Dxing
To: info-hams@ucsd.edu

the other day I made my first attempt at gray line dxing from here in the San Francisco bay area. I worked a Taiwan ham on 40 meters at around 0100UTC (6:00am) for my only second DX contact on 40 meters. I heard a fair amount of strong signals and about 15 minutes later they all more or less dropped out. Now according to a gray line program that I have Taiwan is not on the gray line. He was 559 to me and I was the same to him. How exactly does Gray Line dxing work? Does the other DX stations have to be almost exactly on the gray line to have it work or in the general ballpark? From what I can tell Gray Line should work whether the station is at it's sunset/rise times. Thanks for any help here! 73!

Jeff

--

| | | |
|---------------------------|--|-------------------------------------------------|
| Jeff Jones AB6MB | | OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT! |
| jeffj@seeker.mystic.com | | Canada/USA Free Trade cost Canada 400,000 jobs. |
| Infolinc BBS 415-778-5929 | | Want to guess how many we'll lose to Mexico? |

Date: 12 Apr 1993 19:32:45 GMT
From: usc!howland.reston.ans.net!gatech!concert!lester.appstate.edu!
lester.appstate.edu!usenet@network.UCSD.EDU
Subject: Hamming on St. Thomas, USVI?
To: info-hams@ucsd.edu

In <clark.734632332@angelo> clark@angelo.amd.com writes:

> n2gj@phsbbs.princeton.nj.us (Gerry Jurrens) writes:
>
> >HI!
> >
> >We're planning a vacation trip to St. Thomas in the US Virgin Islands
> >this summer. Anyone know anything about ham radio there? Is it worth it
> >to bring along a 2m HT for example? Are there radio clubs there?
> >
> >Any info would be appreciated.
> >
>
> There are a couple of repeaters on St. THomas, a couple on St.Croix, and
> even one on Tortola that are reachable by HT..... There used to be a lunch
> every Wednesday just west of Christiansted, at a place called the Quarter-

> deck, with a lot of the USVI (and a few of the BVI) hams showing up for
> good eats and Adult Bevvies. I don't know if the location has moved, but
> I think the weekly lunch is still going on.....
>
> I forget the freqs of the island repeaters, but they're pretty common.
>
> Enjoy!
>
> Brad // NP4AI

The 10 meter FM repeater 29.66 has been loud and clear in North Carolina for a couple of weeks when 10 is open. Stations in Mexico City, Boston, Detroit, Tucson and Canada.

Is there a local (US Virgin Islands) two meter crosslink to this so that someone with a handheld could talk over North America?

Marv Hoffman, KD4EGV
Appalachian State University
Boone, NC

Date: Mon, 12 Apr 1993 20:33:06 GMT
From: usc!howland.reston.ans.net!bogus.sura.net!darwin.sura.net!
news.duc.auburn.edu!lab13!morgage@network.UCSD.EDU
Subject: Help!
To: info-hams@ucsd.edu

I need gifs, clip art, whatever of ham radio stuff for our club's newsletter and posters. I would like thing like pictures of satellites, radios, adventurous ham erecting antennae in unusual (or otherwise) places, etc. Thing that non hams can relate to would be best. If anyone has any please email me and let me know. We can work out how to transmit them then. Thanks for the help!

Eric Morgan
N2LGD

.....
....

Date: Mon, 12 Apr 1993 18:50:28 GMT
From: pipex!bnr.co.uk!corpgate!brtph560!nrtpa038!node_17aa4!kme@uunet.uu.net
Subject: help me please identify old transistors
To: info-hams@ucsd.edu

In article <C5CF1w.p9.1@cs.cmu.edu>, aki+@cs.cmu.edu (Yoshiaki Ohshima) writes:
|>
|> q1) i'm looking for some transistors:
|>
|> bc107 (small metal can)
|> bc141-10 (metal can)

Date: 12 Apr 93 19:27:58 GMT
From: news-mail-gateway@ucsd.edu
Subject: N0DH address no good?
To: info-hams@ucsd.edu

>I worked V44KI a while back, and was given N0DH as the QSL manager
>unfortunately, the callbook server lists the entry as:
>N0DH - David C. Henderson Extra
>5105 Lake Washington Rd.
>Melbourne, FL 32935
>"Forward order expired." Does anyone have a '93 callbook or
>could otherwise get me a valid QSL address?
>73, Scott NF3I

I'll see what i can do...will be at a radio club meeting tonight, if i
see one of the DX crowd (K0SVX or WA4DRU etc.) i'll see if they know
anything about him.

the 93 callbook i have here has the same address.

! but wait !

the NEW PHONE BOOKS are here!
and there are 2 hits (8) or should that be 8()

Checking Melbourne/Palm Bay...

D C Henderson 1343 Highway A1A Satellite Beach FL 32937 (407) 777-5848
David & Marjorie Henderson 1305 Garwood Drive, Melbourne 329?? 723-0099

no hits on Cocoa, Cocoa Beach, or Sebastian. (300K people and we don't have a
unified phone book - lets the fiefdoms pretend they're important cities).

so unless he's gone stealth, i would try the first address...

the email address here is either

wb9ivr%pubs%genav.mlb@ns14.cca.cr.rockwell.com
or wenewkir@crems.cr.rockwell.com
or 380-0555@mcimail.com (checked regularly, but not frequently)
or 76427.1561@compuserve.com (ditto)
or w.newkirk@genie.geis.com (but only after GE drops the price a bunch).

would have sent this as mail, but i wasn't sure about your return path.

73, bill wb9ivr

Date: Mon, 12 Apr 1993 08:30:04 MDT
From: access.usask.ca!kakwa.ucs.ualberta.ca!alberta!nebulus!ve6mgs!
usenet@decwrl.dec.com
Subject: OPDX Bulletin #107 - April 12, 1993
To: info-hams@ucsd.edu

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 107
BID: \$OPDX.107
April 12, 1993
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DF4RD, W2JGR, K2MM, WB3LHD, K4CEF & Southeastern Cluster Group, WF5T, K6OZL, KQ8M, N9HZQ and N9LJX for the following DX information.

4N5, MACEDONIA. This country is still under study by the ARRL Awards Committee for possible DXCC country status, but this may change. This week Macedonia was approved for U.N. admission by the Security Council after months of haggling with Greece over the symbolism of former Yugoslav republic's name and flag. Under a compromise worked out with Greece, the new country was admitted with the cumbersome provisional name "The Former Yugoslav Republic of Macedonia." Negotiators will choose a new name later. (from the Associated Press)

5A, LIBYA (and 3V, TUNISIA). Information from Murphy, W4WMQ, and Verne, W8BLA, indicate that Romeo, 3W3RR, was reportedly in the hospital with pneumonia, but there are reports now stating he is out. The reported status of these operations is that the equipment for both 5A and 3V are still in Sofia. At this time there are insufficient funds for the

operations and the DXpeditions will be postponed until May. Also, there has been some "coordination difficulties" with 5A officials. It was also reported that Romeo may make it to Dayton Hamvention depending on his health.

5X, UGANDA. Paul, WF5T, supplied OPDX with more information on his upcoming DXpedition to 5X-land. Paul mentions not only is James, N3JCL, accompanying him, but Jim, KF7E, has been added to the trip. Jim is awaiting his own assigned call sign and plans to do his own QSLing. Tentatively, they plan to start operations from the Queen Elizabeth National Park in the Southwestern part of Uganda. Do to travel time, they may not be on the air until April 28.

9G, GHANA. The 9G1AA operators have stated that they will be shutting down their station at 0000z, April 12th. The operators were invited to return to Ghana and have stated they would return in November. They have a permanent license. It was also reported that the operators did not operate any RTTY because the equipment was damaged in transit and was unrepairable. They tried to arrange for replacement gear, but were unsuccessful. Jules, W2JGR, was told by one of the operators that "RTTY is completely out of the question for this trip, but will be definitely in the next trip".

BY, CHINA. Dieter, DJ7BU, has been active on 30 meters using the university club station BY1QH. He usually can be found on Saturdays around 1000z. When working Dieter, QSL via to his CBA.

ET, ETHIOPIA. There has been plenty of activity from this one by ET3DX, ET3TI, ET3YU and ET3SID. Most of the activity seems to be on 15 and 20 meters. QSL ET3DX to JH1AJT, ET3TI to OH5MVT, ET3YU to YU1FW and ET3SID to Syd T. May, POB 60222, UNECA ADDIS ABEBA, Ethiopia.

HB0, LIECHTENSTEIN. The 17th Annual DXpedition to Liechtenstein by the Wiesbaden Amateur Radio Club (DA1WA) will take place May 28th thru June 6th (There will be some individual activity after June 6th.). HB0/DA1WA will operate on CW, SSB, PR, RTTY, AMTOR, PACTOR and Satellite. Activity will be on 160 thru 10 meters as well as 2 and 6 meters. North American QSLs go to KN6G at Box 4205, APO AE 09192. QSLs outside of N.A. go to DJ0LC.

Wulf, DL2GWL, and Andy, DL8GCL, will also be active from here for 4 days, May 13-16. Callsigns HB0/DL2GWL and HB0/DL8GCL will be used on the HF bands. QSL direct with one IRC to: DL8GCL, A. Lenk, Am Eichwald 15, D-7898 Lauchringen or DL2GCL, W. Lang, Bundesstrasse 12, D-7898 Lauchringen.

JT, MONGOLIA. Jeff, N9HZQ, received a letter from John, N9JXU, stating the following: Dave, JT1/KB9IBZ, who is a missionary in Ulaan Baator, meets with his QSL Manager John, N9JXU, every Friday at 0100z on 14220

kHz. Anyone who needs JT is invited to stop by. John also mentioned that Dave and the MRSF club radio station is in need of some tubes. If you have any of the following tubes, PLEASE contact John, N9JXU: 2 - 12BY7A, 2 - 52001 (6146B), 2 - 6EJ7, 2 - 6JSC6 and 4 - 811A.

V4, ST. KITTS. Joe, WB8GEX, and John, WZ8D, will be active April 10th thru the 17th. Callsigns will be V47NF and V47WZ. Activity will be on all bands and they plan to operate on the low end of the General's portions of the band (if needed, they will listen up 4 to 5 kHz). Look for them on 28494 kHz +/- QRM. For 160 meters, check 1834 kHz at 0200z. QSL's for V47NF go to WB8GEW (not WB8GEX) and for V47WZ, they go to WZ8D.

VK9Z, MELLISH REEF. Guy Collin, ON4ACG, is soliciting for more operators for the mid to late September DXpedition to Mellish Reef. If interested, contact Guy for more details. His phone number is 016.44.55.59 and his FAX number is 016.44.33.62.

XT, BURKINA FASO. Peter, XT2BW, has been quite active on RTTY on or around 14086 kHz at 0630z. Peter mentioned that he likes to show up from time to time on RTTY before he leaves for work in the mornings. QSL via WB2YQH.

ZA1A CARDS. Martti Laine, OH2BH, has mentioned this weekend that OH2BGH will be bringing ZA1A QSL cards with him to be mailed in the USA. These are the cards that came with non-standard European sized envelopes. As mentioned in last week's bulletin, sending non-standard European sized envelopes in Finland requires more than \$1 U.S. postage.

DXAC NEWS. The result DXAC vote on Czechoslovakia was released this week and the DXAC voted 16-0 to delete Czechoslovakia and to add the Czech and Slovak Republics as new DXCC countries. This recommendation will now be sent to the ARRL Awards Committee for action.

The DXAC also voted against a change in Rule 10. The voted was 14 to 1 not to change DXCC Rule 10 to allow contacts made from a club station to apply to an individual's DXCC award. Committee members saw no compelling reason to change the existing rule.

FAX YOUR DX INFORMATION NOW! Faxing is available Monday/Wednesday/Friday from 0430 to 2330z only. The number is 216-237-8208 and operates Group 3 FAX Service Class 2 (EIA/TIA 592) only. Use only the dates and times specified. FAX Service Class 1 (EIA/TIA 578) is available upon request by leaving a message to the Sysop on BARF-80 BBS. The FAX card is sharing the same phone line as BARF-80 BBS using a data/fax/phone switch.

Excerpts and distribution of The OPDX Bulletin are granted as long as OPDX/BARF80 receive credit. To contribute DX info, call BARF-80 BBS online at 216-237-8208 14400/9600/2400/1200/300 and leave a message with the Sysop or send InterNet Mail to: aq474@cleveland.freenet.edu or send

BitNet Mail to: aq474%cleveland.freenet@cunyvms or send PRODIGY Mail to:
DFJH48A or send a message via packet to KB8NW @ WA8BXN.OH.USA.NA

--

Jim Reisert Internet: reisert@mast.enet.dec.com
Digital Equipment Corp. UUCP: ...decwrl!mast.enet.dec.com!reisert
146 Main Street - ML03-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395

Date: 12 Apr 93 19:24:36 GMT
From: swrinde!zaphod.mps.ohio-state.edu!cs.utexas.edu!milano!shrike!ut-emx!
astro.as.utexas.edu!oo7@network.UCSD.EDU
Subject: QSL cards from Mongolia
To: info-hams@ucsd.edu

Someone here suggested marking direct mail to Mongolia "via Japan" after the Mongolian address. I just wanted to report that it worked for me - 3 cards out to different JTs, 3 cards back direct in quite a short time. JT cards have always been hit and miss for me - some come via the bureau, most direct ones were not answered. Anyway, if you need one, try this route - and thanks to whomever suggested it. (The default route takes the mail through Russia (ex-USSR), where the \$s and IRCs tend to evaporate. Marking it via JA avoids this part of the trip).

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

Date: 12 Apr 93 16:06:16 EDT
From: swrinde!zaphod.mps.ohio-state.edu!howland.reston.ans.net!bogus.sura.net!
udel!news.intercon.com!psinntp!arrl.org@network.UCSD.EDU
Subject: RFD: rec.radio.amateur reorganization
To: info-hams@ucsd.edu

In news.groups, ikluft@uts.amdahl.com (Ian Kluff) writes:
>mark@ve6mgs.ampr.org (Mark G. Salyzyn) writes:
>>We have two proposals on the table here! I have not seen many comment in
>>any major fashion about these two proposals.
>
>Agreed. I'm finding it difficult to take a tally of which one has more
>support because so few comments have been posted on it. (Many thanks to those

>who have mentioned a preference either way.)

Well, since you ask... :-)

>OK... friendly counteropinion time... I support Option I. (Can anyone guess
>whose input contributed to which parts of the RFD?) The reason is because
>Ham Radio is almost entirely a technical subject.

I agree with your conclusion, if not completely with your reasoning.
I notice no one has suggested folding .operating into .tech, so I
guess there are **some** nontechnical components of ham radio!

A better way to put it, I think, is that most parts of ham radio have
some technical **component**. (That may be what you meant.) That being
the case, having a .tech group and a .misc group will lead to much
confusion as to where to post. Which will lead to a greater level of
crossposting with the associated problems for some users.

>The r.r.a.tech group seems
>(to me anyway) to blur too much with r.r.a.misc due to the breadth of its
>coverage. I think that breadth will cause confusion as when users try to
>pick r.r.a.tech or r.r.a.misc to post in...

It blurs not only with the r.r.a.misc group, but with other groups
as well.

>For reference, here is Option I (subject to change by this discussion):

- > rec.radio.amateur.misc (existing)
- > rec.radio.amateur.policy (existing)
- > rec.radio.amateur.digital.misc (existing as r.r.a.packet)
- > rec.radio.amateur.digital.tcp-ip
- > rec.radio.amateur.operating
- > rec.radio.amateur.products
- > rec.radio.amateur.instruction
- > rec.radio.amateur.construction
- > rec.radio.amateur.space
- > rec.radio.amateur.emerg-services

In general, I think this option (option I) is the way to go. I do
have a couple of specific suggestions I'd like to toss into the
discussion.

r.r.a.instruction: I'd like to see this broadened to include all kinds
of beginner-oriented discussion, not just licensing issues. One of
the questions I've asked myself in looking at this list of newsgroups
is, "if I were a newbie wanting to ask a question, where would I post
it?" I don't think the answer is clear given the above list of
groups. Therefore, I propose the following:

Change r.r.a.instruction
to r.r.a.beginner

with the charter: Discussion of questions and answers (both technical and nontechnical) from newcomers to amateur radio, licensing procedures and schedules, instruction, and educational uses of amateur radio. [This includes all topics in the original proposed charter for r.r.a.instruction.]

Since those who want to discuss instructional material are usually either those asking for or those providing beginner's info, this seems like a logical coupling of needs.

r.r.a.digital: Wouldn't r.r.a.datacomm (or r.r.a.dcom?) be better? I mean, "digital" sounds like it refers to CMOS keyer circuitry. Or maybe it only clangs in *my* ear.

r.r.a.construction: I think some of the support for option II comes about because there doesn't seem to be a place for wide-ranging technical discussions. I think the charter of r.r.a.construction allows for such discussion, but again, the *name* of the group doesn't do a good job of indicating that. After all, I might very well want to discuss how an electromagnetic wave forms on an antenna without having the least intention of constructing one (antenna, that is). The rra-reorg mail discussion, and some of the subsequent discussion here, seemed to vacillate between a sweeping "everything is technical" approach and a divide-into-500-little-groups approach to technical discussion. *I* think a general tech group can stand with the other proposed groups. Granting that some of the other groups (products, beginners [if accepted], space) have large technical components, that isn't the primary point of any of those groups. We need a group that does focus on technical discussions for their own sake. And since I can think of no better name, I propose:

Change r.r.a.construction
to r.r.a.technical

with the charter: Discussion of amateur radio technical matters not covered elsewhere, including design, construction and testing of amateur radio and related equipment as well as radio phenomena.

I think these proposed changes would be improvements, but I could swallow hard and support option I as it stands if that's what shows up in a CFV.

Jon Bloom, KE3Z

| jbbloom@arrl.org

American Radio Relay League | Justice is being allowed to do whatever
225 Main St. | I like. Injustice is whatever prevents
Newington, CT 06111 | my doing so. -- Samuel Johnson

Date: (null)
From: (null)
bc107 -> GE-20, HEPS0038, SK3122, ECG123A
bc141-10 -> GE-243, HEPS3019, SK3024, ECG128

Hope this is of help...

--

=====
Ken M. Edwards, Bell Northern Research, Research Triangle Park, NC
(919) 481-8476 email: cnc23a@bnr.ca Ham: N4ZBB

All opinions are my own and do not necessarily reflect the views of
my employer or co-workers, family, friends, congress, or president.

Date: Mon, 12 Apr 1993 18:35:40 GMT
From: telesoft!garym@uunet.uu.net
To: info-hams@ucsd.edu

References <1993Apr9.140121.6210@telesoft.com>,
<1993Apr9.212435.10483@telesoft.com>, <1993Apr11.001148.3951@telesoft.com>
Subject : STS-56 Element Set (102.43)

STS-56
1 22621U 93 23 A 93102.43207146 +.00059046 00000-0 16177-3 0 149
2 22621 57.0024 159.4708 0006016 323.5261 36.5406 15.93561138 682

Satellite: STS-56
Catalog number: 22621
Epoch time: 93102.43207146 (12 APR 93 10:22:10.98 UTC)
Element set: GSFC-014
Inclination: 57.0024 deg
RA of node: 159.4708 deg Space Shuttle Flight STS-56
Eccentricity: 0.0006016 Keplerian Elements
Arg of perigee: 323.5261 deg
Mean anomaly: 36.5406 deg
Mean motion: 15.93561138 rev/day Semi-major Axis: 6670.4589 Km
Decay rate: 0.59E-03 rev/day*2 Apogee Alt: 296.08 Km

Epoch rev: 68 Perigee Alt: 288.06 Km

NOTE - This element set is based on NORAD element set # 014.
The spacecraft has been propagated to the next ascending
node, and the orbit number has been adjusted to bring it
into agreement with the NASA numbering convention.

R.A. Parise, Goddard Space Flight Center
G.L.CARMAN
Robert Kliman

--

Gary Morris KK6YB Internet: elements-request@telesoft.com
San Diego, CA, USA Phone: +1 619-457-2700
(For a Shuttle Elements subscription email to: elements-request@telesoft.com)
(STS elements and related info are archived, email: listserv@telesoft.com)

End of Info-Hams Digest V93 #453
